



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/990,973	12/15/1997	ELIZABETH A. SMITH	01263.59651	1916

5642 7590 04/22/2005

SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

EXAMINER
----------

SALCE, JASON P

ART UNIT	PAPER NUMBER
----------	--------------

2611

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 08/990,973	<b>Applicant(s)</b> SMITH ET AL.	
	<b>Examiner</b> Jason P Salce	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/13/2005 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent 4,829,558) in view of Reiter et al. (U.S. Patent 4,751,578).

Referring to claim 27, Welsh discloses receiving a first user input at a subscriber terminal indicating a choice for first operation data, wherein the first operation data includes a plurality of screens (see Column 10, Lines 3-9 for selecting a screen (first operation data) for display).

Welsh also discloses displaying the first operation data according to the user input (see Column 10, Lines 9-13 for writing the selected screen to the display), wherein the first operation data is stored at the subscriber terminal (see Column 10, Line 11 for the screen data being written to RAM 51).

Welsh also discloses generating a screen of first operation data responsive to a command at Column 9, Lines 3-9 for a video display generator 55 used to display a screen and Column 8, Lines 20-23 for selecting between a standard broadcast television signal and screens.

Welsh also discloses that the screen of operation data is generated by a local screen character generator at Column 6, Lines 60-66 and Figure 2 for the video display generator 55 (which receives data from the video RAM 62) being a component in the home (see also Column 5, Lines 57-59).

Welsh also discloses that the first operation data is stored in at least one of a screen generator coupled to the system manager and subscriber terminal memory. Note that at Column 9, Lines 58-61, Welsh discloses that RAM 51 can store up to 600 screens and also at Column 9, Lines 3-4, the local screen generator (video display generator 55) also stores the present screen in RAM 62.

Welsh fails to disclose displaying the video signal and the screen of the first operation data according to the user input, therefore having the functionality of overlaying the operation data onto the video signal.

Reiter discloses overlaying operation data onto a video signal for display to a user (see Column 2, Lines 25-29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the television display, as taught by Welsh, using the overlay technology, as taught by Reiter, for the purpose of allowing a viewer to continue to view the television program he is currently watching, while overlaying the data of interest to the viewer on the television display (see Column 6, Lines 29-38 of Reiter).

Referring to claim 28, Welsh discloses storing all screens in RAM 51 and that responding to each screen causes the microprocessor 43 to search for the next screen (see Column 10, Lines 65-67 and Column 11, Lines 1-2 and also note that the first screen in the series of screens is inherently the "feature start screen" and all screens after that are the "associated screens"). Welsh also teaches that the user selects the screen or screens to be displayed (see Column 10, Lines 3-5) and that the screens are sent from the system manager (central computer 25) and stored prior to their actual use (see Column 9, Lines 58-61 for the RAM 51 being capable of holding up to 600 screens and Column 9, Lines 43-45 for sending the screen data all at once).

Referring to claim 29, Welsh discloses receiving a second user input for one of the associated screen according to a channel map (RAM 51, which discloses the locations of all the screens) associated with the first operation data (see again Column 10, Lines 66-67 and Column 11, Lines 1-2 for receiving multiple inputs, where each input is requesting the next screen).

Welsh also discloses transmitting the second user input to the system manager (see Column 9, Lines 34-37 for transmitting further screen data depending upon the requirements of the questionnaire being completed).

Welsh also discloses receiving information from the system manager for updating the associated screen (see Column 9, Lines 42-45 for sending the data to the terminal and Column 9, Lines 43-52 for storing the screens in RAM).

Welsh also discloses displaying the associated screen including the updated information in accordance with the second user input (see Column 10, Lines 3-5 for displaying a stored screen and Column 10, Lines 66-67 and Column 11, Lines 1-2 for displaying a next screen according to the next user input).

Referring to claim 30, Welsh see rejection of claim 29.

Referring to claim 31, see rejection of claims 27-28 and note that data can also be stored at the system manager (central computer 25) (see Column 12, Lines 65-66).

Referring to claim 32, see rejection of claim 29.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 53-54 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Welsh (U.S. Patent No. 4,829,558).

Referring to claim 53, Welsh discloses providing a plurality of two-way terminals (see Figure 1 for homes 9, which all contain terminal 13).

Welsh also discloses generating at the premises of a subscriber a screen for display on a television, wherein the screen relates to information about services provided by the subscriber of the interactive entertainment system (see Column 4, Lines 53-56 for generating (at an FM station) and displaying (on a television) screens and Column 4, Lines 42-46 for the system providing home shopping services), and wherein the services for selection are offered by an interactive entertainment system (see FM broadcast station 5 in Figure 1, which provides the screen data to the terminals at Column 4, Lines 53-56). The examiner notes that since the FM broadcast station 5 in Figure 1 is sending the interactive screens (users can respond to the screens) to the users in their homes, the FM broadcast station 5 is therefore, an interactive entertainment system.

Welsh also discloses receiving a selection from a guest (see Column 9, Lines 20-24).

The examiner notes that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer. Therefore the subscriber provides the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions).

Referring to claim 54, see rejection of claim 53 and note that Welsh discloses receiving content (television programs) as well as screens (see Column 8, Lines 20-24).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33, 39-40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157).

Referring to claim 33, Welsh discloses generating at the premises of a subscriber a screen for selecting services (see Column 4, Lines 53-56 for generating (at an FM station) and displaying (on a television) screens and Column 4, Lines 42-46 for the system providing home shopping services), wherein the screen is one of a plurality of screens (see Column 10, Lines 66-67 and Column 11, Lines 1-2), and wherein the services for selection are offered by an interactive entertainment system (see FM broadcast station 5 in Figure 1, which provides the screen data to the terminals at Column 4, Lines 53-56). The examiner notes that since the FM broadcast station 5 in Figure 1 is sending the interactive screens (users can respond to the screens) to the users in their homes, the FM broadcast station 5 is therefore, an interactive entertainment system. Also note Column 9, Lines 34-37 for the central computer 25



recording responses from the guest and sending additional screen data if needed, therefore the subscriber can also offer additional services.

Welsh also discloses providing a terminal (see Figures 2-3), the terminal adapted to receiver input from a guest and adapted to provide the screen to a display device (see Column 5, Lines 26-30 for receiving input from a guest and Column 10, Lines 3-15 for the video display generator 55 displaying the screen to the display).

Welsh also discloses receiving a selection from a guest (see Column 9, Lines 20-24).

Although Welsh discloses home shopping services and receiving screens to allow users to make selections and that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer, thereby providing the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions), Welsh fails to specifically disclose a menu for selecting services from an interactive system.

Kirschner discloses that screens can contain menus for selecting from different interactive services (see Column 5, Lines 10-64 for examples of two such menus).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the screens of Welsh, utilizing the menus of Kirschner for the purpose of providing an organized selection system for the user to access the proper services in a more efficient manner.

Claim 39 corresponds to claim 33, where Welsh discloses that screens are generated by a video display generator 55 in Figure 3 (also note Column 9, Lines 3-9).

Claim 40 corresponds to claim 33, where Welsh discloses associating a given screen of the menu with a given television channel (see Column 10, Lines 28-38 and note that Kirschner is used to teach a menu screen). Note that the FM receiver 33 "tunes" to a given frequency transmitted over the television network, therefore if a screen is displayed, it is supplied from a specific television channel frequency.

Welsh also discloses outputting the given screen from the terminal such that the screen is displayable on a television tuned to the given television channel (see Column 10, Lines 62-64).

Referring to claim 43, see rejection of claim 33 where both Welsh and Kirschner disclose offering services by the subscriber. The examiner notes that the subscriber responds to a questionnaire at Column 11, Lines 5-25, which is used by the central computer. Therefore the subscriber provides the service of a viewer response system in response to the screen, which relates to information about services (response system) provided by the subscriber (by answering the questions).

5. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Reiter.

Claim 46 corresponds to claim 33, where Welsh teaches the additional limitations of receiving a video signal (see Column 5, Lines 4-7), outputting the video signal such

Art Unit: 2611

that the video signal is displayable on a television (see Column 8, Lines 20-24), and outputting the screen such that the screen is displayable on a television (see Column 8, Lines 20-24).

However, Welsh and Kirschner fail to teach the additional limitation of superimposing the screen over the video signal.

Reiter discloses overlaying operation data onto a video signal for display to a user (see Column 2, Lines 25-29).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the television display, as taught by Welsh and Kirschner, using the overlay technology, as taught by Reiter, for the purpose of allowing a viewer to continue to view the television program he is currently watching, while overlaying the data of interest to the viewer on the television display (see Column 6, Lines 29-38 of Reiter).

6. Claims 34-36, 38, 41, 44-45 and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Iwashita (U.S. Patent No. 4,928,168).

Referring to claim 34, Welsh and Kirschner disclose all of the limitations in claim 33, but fail to disclose a screen that includes charges owed by the guest. Iwashita discloses a screen that displays the charges owed by a guest (see Figure 3). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the one of the screens presented to the guest, as taught by Welsh and

Art Unit: 2611

Kirschner, using the charges owed screen in Figure 3 of Iwashita, for the purpose of providing proper payment information to the user before he/she checks out of the hotel, therefore providing a convenient service to the guest (see Column 5, Lines 52-57 of Iwashita).

Claim 35 corresponds to claim 34, where Iwashita also teaches the additional limitation of the charges include charges for services offered by the interactive entertainment system (note in Figure 3 and Column 5, Lines 52-57 disclose that charges include a bill for pay television programs that have been viewed).

Claim 36 corresponds to claim 34, where Iwashita also teaches the additional limitation of the subscriber providing room service to guests, and the charges include charges for room services (note that the pay television channels are provided to a guest at a subscriber location (his/her room), therefore see the rejection of claim 35).

Claim 38 corresponds to claim 33, where Kirschner and Welsh teach transmitting the screen downstream through a local area network to the terminal (see Column 4, Lines 53-59 of Welsh and Column 4, Lines 62-64 of Kirschner). Kirschner and Welsh also teach a system manager (see element 25 in Figure 1 of Welsh and element 20 in Figure 1 of Kirschner), but fail to disclose that the system manager is located at the premises of the subscriber and adapted to control billing of the guest. Iwashita discloses a central computer 3 (in a hotel system, which is therefore at the subscriber's premises) used to control billing of the guest (see Column 5, Lines 13-65 and Figure 3).

At the time the invention was made, it would have been obvious of ordinary skill in the art to modify the system of Welsh and Kirschner, using the system manager

(central computer 3) in Figure 1 that controls billing of a guest, as taught by Iwashita, for the purpose of providing proper payment information to the user before he/she checks out of the hotel, therefore providing a convenient service to the guest (see Column 5, Lines 52-57 of Iwashita).

Referring to claims 41, see rejection of claim 36.

Referring to claim 44, see rejection of claim 33 and 38, and also note that Welsh discloses retrieving additional (second, third or fourth, etc.) screen data from the central computer 25 (see Column 9, Lines 34-37 and Column 10, Lines 66-67 and Column 11, Lines 1-2). Also note that at Column 9, Lines 60-61 screens are only stored when necessary.

Claim 45 corresponds to claim 44, see rejection of claim 44 and again note that Welsh discloses that the central computer 25 can send additional data upon reading responses from the guest (see Column 9, Lines 34-37). Also note Column 12, Lines 4-8 for transmitting up to date screen data.

Referring to claim 47, see rejection of claim 33, 38 and 43.

Referring to claim 48, see rejection of claim 39.

Referring to claims 49-50, see the rejection of claims 44 and 45 for Welsh disclosing accessing additional screen.

Referring to claims 51-52, see rejection of claims 36-37, respectively.

7. Claims 37 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Welsh (U.S. Patent No. 4,829,558) in view of Kirschner et al. (U.S. Patent No. 4,253,157) in further view of Couch et al. (U.S. Patent No. 4,752,876).

Claim 37 corresponds to claim 33, where Kirschner and Welsh fail to specifically disclose a screen for checking out of the subscriber premises (room) using the terminal.

Couch discloses an automated check-out service at the subscriber's premises (the lodging facility) (see Column 3, Lines 30-33 and Column 6, Lines 5-19 and Figure 5).

It would have been obvious to a person of ordinary skill in the art to modify the screens provided by Welsh and Kirschner, using the automated check-out system, as taught by Couch, for the purpose of reducing labor cost for the lodging facility and the possibility for human mistake (see Column 3, Lines 45-48 of Couch).

Referring to claim 42, see the rejection of claim 37.

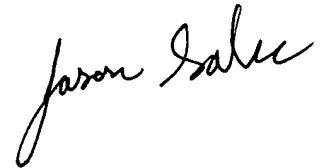
### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce  
Patent Examiner  
Art Unit 2611

A handwritten signature in black ink that reads "Jason Salce". The signature is written in a cursive style with a large, stylized "J" and "S".

April 18, 2005